(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 25 March 2004 (25.03.2004)

PCT

(10) International Publication Number WO 2004/025895 A1

(51) International Patent Classification7: 29/06, 9/00

H04L 9/32,

(74) Agents: LIND, Robert et al.; Marks & Clerk, 4220 Nash Court, Oxford Business Park South, Oxford, Oxfordshire

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

(21) International Application Number:

PCT/EP2002/010400

(22) International Filing Date:

13 September 2002 (13.09.2002)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): TELE-FONAKTIEBOLAGET LM ERICSSON (PUBL) [SE/SE]; S.12625 Stockholm (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): AHONEN, Pasi [FI/FI]; Salotie 5, FIN-90630 Oulu (FI). UUSITALO, Ilkka [FI/FI]; Palosuontie 6 b 6, FIN-90800 Oulu (FI). MÄNTYLÄ, Vesa-Matti [FI/FI]; Koskitie 26 A 8, FIN-90500 Oulu (FI).

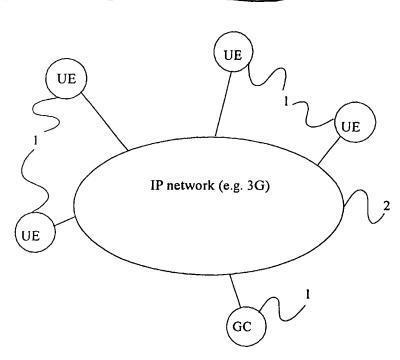
- OX4 2RU (GB).
 - CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: SECURE BROADCAST/MULTICAST SERVICE



(57) Abstract: A method of authenticating candidate members 1 wishing to participate in an IP multicast via a communication network, where data sent as part of the multicast is to be encrypted using a Logical Key Hierarchy based scheme requiring that each candidate member submit a public key to a group controller. The method comprises, at the group controller 1, verifying that the public key received from each candidate member 1 is owned by that member and that it is associated with the IP address of that candidate member 1 by inspecting an interfaceID part of the IP address.